

經濟部智慧財產局專利核駁審定書

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- 一、申請案號數：〇九〇一一二二七八
- 二、發明名稱：永久磁鐵型旋轉電樞
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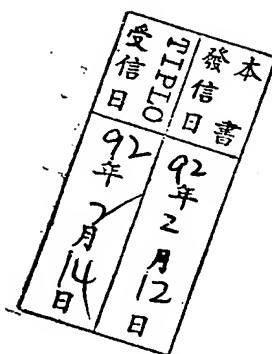
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六、優先權項目：

1 2000/05/24 日本2000-153387



專利分類IPC(7)：...H02K 19/10



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七、審查人員姓名：彭極富 委員

八、審定內容：

主文：本案應不予專利。

依據：專利法第二十條第二項。

理由：

(一) 本案「永久磁鐵型旋轉電樞」，依說明書之說明係由收納在狹槽內部具有電樞線圈之定子鐵心所形成之定子，及位於前記定子內側磁束容易通過部分(D軸)與磁束不容易通過部分(D軸)交互地設置由空洞所形成之複數磁障壁，並在前記空洞內配置永久磁鐵之轉子鐵心形成轉子所構成，其特徵為：前記轉子在前記D軸方向所配置空洞之轉子半徑方向向外側之轉子鐵心平均厚度設為 $M_{qave}[E]$ ，前記空洞周圍方向之寬度為 $L[E]$ ，極數為P，轉子半徑為 $R[E]$ 時，以滿足 $PL/\pi^2 R_{mqave} \geq 130$ 關係所構成。

(二) 本案之永久磁鐵型旋轉電樞之申請專利範圍，已見於1999年01月07日歐洲專利公告編號第EP0889574號(如附件一)，名稱「Reluctance type rotating machine with permanent magnet」，說明書全部及圖式第一至三十八圖；1999年12月28日美國專利公告編號第US6008559號(如附件二)，名稱「Motor using a rotor including an interior permanent magnet」，說明書Description of the preferred embodiments中有關圖式第一圖之說明及圖式第一圖；1999年01月22日日本專利公告編號第JP11-





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18328號（如附件三），名稱「永久磁石式同期電動機」，發明詳細說明【0031】及圖式第一至六圖。已揭露本案永久磁鐵型旋轉電樞之技術內容及特點，本案係運用申請前既有之技術或知識，而為熟習該項技術所能輕易完成者，故不具進步性。

據上論結，本案不符法定專利要件，爰依專利法第二十條第二項，審定如主文。

局長 蔡練生

依照分層負責規定授權單位主管決行

如不服本審定，得於文到之次日起三十日內，備具再審查理由書一式二份及規費新台幣陸仟元整（專利說明書及圖式合計在五十頁以上者，每五十頁加收新台幣五百元，其不足五十頁者以五十頁計），向本局申請再審查。

(Translation)

DECISION OF REJECTION

Taiwan Patent Application No.: 9011278

The present application is rejected under Section 20 (2) of the Patent Law.

REASON:

1. According to the specification of the present application, a claimed permanent magnet type reluctance electric motor is characterized by comprising: a stator including a stator iron core and having armature coils placed inside slots; and a rotor provided with a plurality of magnetic barriers formed by cavities and placed on an inner side of the stator in such a manner that sections where magnetic flux can easily pass (d-axis) and sections where magnetic flux cannot easily pass (q-axis) are alternately formed, and made of a rotor iron core having permanent magnets in the cavities, wherein the rotor satisfies the relationship of $PL / 2\pi RW_{qave} \leq 130$, where W_{qave} [m] indicates the average thickness of the rotor iron core on the outer side in the radial direction of the rotor with respect to the cavities arranged in the q-axis direction, L [m] indicates the width in the circumferential direction of the cavities, P indicates the number of poles and R [m] indicates the radius of the rotor.

2. The permanent magnet type reluctance electric motor claimed in the present application is disclosed in:

European Patent Publication No. EP 0889574A1 (Attached document 1: dated January 7, 1999; title of the invention "Reluctance type rotating

machine with permanent magnet”), the whole portion of the specification and FIGS. 1–38;

U.S. Patent Publication No. 6,008,559 (Attached document 2: dated December 28, 1999; title of the invention “Motor using a rotor including an interior permanent magnet”), FIG. 1 and its pertinent description in the Description of the Preferred Embodiment; and

Jpn. Pat. Appln. KOKAI Publication No. 11-18328 (Attached document 3: dated January 22, 1999; title of the invention “Permanent magnetic type synchronous motor”), the Detailed Description of the Invention in paragraph 0031 and FIGS. 1–6.

Thus, the technique and feature of the permanent magnetic type reluctance electric motor of the present application is disclosed in the references, and the present invention can be easily obtained by one having ordinary skill in the art. Therefore, the present invention does not involve an inventive step.

As concluded above, the present application does not satisfy the requirements of patentability, so is rejected under Section 20 (2) of the Patent Law.

If there is any objection against this decision, a request for reexamination can be filed with the Taiwan Patent Office within 30 days of the mailing date hereof, along with two copies of a set of Reason for Reexamination and the official charge of NT \$6,000. (If the total number of pages of the specification and drawings is over 50, NT \$500 is additionally charged for

every 50 pages. If the total number of pages is less than 50 pages, it is calculated as 50 pages.)